### PORT OF MANCHESTER.

### ANNUAL REPORT

OF THE

### Medical Officer of Health

TO THE

### PORT SANITARY AUTHORITY,

1918.

### CONTENTS.

Members of	f Port Sai	nita <b>ry</b> A	utho	ority	• •		• •	• •	5
Sickness du	iring the	Year .	•		• •	• •	• •		6
Table givin	ng details	of Infec	ctiou	s Sick	ness			• •	12
Inspection	of Food	Imports		• •		• •	• •	• •	16
Table shew	ing Princ	ipal Foo	d In	ports	at Chie	ef Hom	e Ports	S	20
Tables shev	ving the I	Principal	Pro	ducing	Count	tries, &	с.	• •	23
Table comp Ports	paring Foo	-			-				24
The Sanitar	ry Condit	ion of Sl	nips	• •	• •		• •	• •	26
Canal Boat	Inspection	on				• •			35
Shipping Ir	nwards to	the Port	-	ş •			, .		39



### Port of Manchester.

To the Chairman and Members of

The Manchester Port Sanitary Authority.

GENTLEMEN,

It is my pleasure and privilege to present to you the Annual Report of the work accomplished under your jurisdiction during the year 1918.

I have the honour to be,

Yours faithfully,

W. F. DEARDEN,

MEDICAL OFFICER OF HEALTH.

Medical Officer's Department,
168, Trafford Road, Salford.
31st March, 1919.



### Manchester Port Sanitary Authority.

```
The membership for the year was as follows:—
Mr. Alderman W. Huddart, J.P., Salford, Chairman.
Mr. Councillor Thos. Robinson, M.P., J.P., Stretford U.D. Deputy-
                                                                 Chairman.
Mr. Councillor W. Bird Midgley . . .
Mr. Councillor W. T. Dagnall ...
Mr. Alderman C. Hornby .. \ Manchester.
Mr. Alderman S. Dixon
Alderman Sir D. McCabe, Kt., J.P.
Alderman Sir Wm. Stephens, Kt., J.P.
Mr. Alderman E. Desquesnes ..
Mr. Councillor W. H. Barrett, J.P. .
                                        \dots \left\{ \begin{aligned} &\text{Borough of Eccles.} \\ &\text{R.D. of Barton-upon-Irwell.} \\ &\text{U.D. of Irlam.} \end{aligned} \right.
Unrepresented .. ..
                                        ... Borough of Warrington. R.D. of Warrington.
Mr. Alderman Jas. Evans, J.P.
                                        U.D. of Lymm.
U.D. of Runcorn.
R.D. of Runcorn.
Mr. Councillor Geo. Pilling, J.P
                                           R.D. of Bucklow.
                                        ... Borough of Widnes.
R.D. of Chester.
R.D. of Wirrall.
Mr. Alderman G. I. Neil, J.P.
     The officials of the Authority are as follows:—
Medical Officer of Health—W. F. DEARDEN, M.R.C.S., L.R.C.P., D.P.H.,
      Telephones: Office, 114 Trafford Park;
                     Residence, 416 Trafford Park.
Clerk—A. Holmes, Solicitor, Bexley Square, Salford. Tel. 5927 Central.
Sanitary Inspectors—H. Atkinson, C.S.M.F.I., ; W. Richmond, C.S.I.
Food Inspectors—J. Almond, C.S.M.F.I.; Geo. Whalley, C.S.M.F.I.
Medical Officer's Clerk-WM. HODSON.
               " Junior Clerk—GEO. HADLEY.
Offices:—168, Trafford Road, Salford.
```

20, Norman Road, Runcorn.

### SICKNESS DURING THE YEAR 1918.

The total number of cases of Sickness reported during the year was 334.

Reported Sickness from 1898–1918 inclusive.

1898	• •	• •	• •		65
1899	• •				46
1900					71
1901				• •	89
1902					144
1903					124
1904					159
1905					109
1906					174
1907					162
1908					138
1909	• •	• •			132
1910		• •			122
1911					143
1912	• •		• •		188
1913	• •	• •			109
1914		• •			103
1915	• •				155
1916				• •	151
1917		• •			109
1918		• •			334

Cases of Sickness of all kinds have been notified, as usual, by the Liverpool Port Sanitary Authority, the Manchester Ship Canal Co., H.M. Customs, Shipowners and Medical Practitioners, but the bulk of information has been obtained by the Inspectors during their visits to the vessels in port.

Infectious cases are dealt with separately in Table IV.

### INFECTIOUS DISEASES.

The diseases notifiable to the Authority under this heading are Smallpox, Diphtheria, Membranous Croup, Erysipelas, Scarlatina, Acute Poliomyelitis, Typhus, Enteric or Typhoid, Relapsing, Continued, Cerebro-Spinal, Puerperal Fevers, and Tuberculosis.

### ENTERIC FEVER.

Ten cases occurred on Manchester bound vessels. Five cases were removed to hospital at Manchester, and in each case the quarters occupied by the patient were thoroughly disinfected and cleansed.

### PHTHISIS.

Four cases were reported. None of the patients were removed to hospital at Manchester.

### MALARIA.

Several cases occurred on Manchester bound vessels during the year. One was admitted to hospital at Philadelphia, and another at Sierra Leone, whilst a third left a vessel at Manchester. Other cases had occurred on four Manchester bound vessels, but were all well on arrival in port.

### DYSENTERY.

One case was reported. The patient was removed to hospital at Bizerta.

### MEASLES.

One case occurred. The patient, a child on the canal boat "Rembrandt," was treated on board the boat.

### CHICKENPOX.

Five cases of Chickenpox were reported, one was removed to hospital at Calcutta, and the others were isolated on the ship.

### ERYSIPELAS.

A sailor of the s.s. "Manchester Shipper" was removed to hospital at Liverpool, suffering from Erysipelas.

### INFLUENZA.

One hundred and sixty-one cases were reported during the year of which ninety cases entered the port. Sixty-eight were removed to hospital at Manchester, and in each case the quarters occupied by the patients were disinfected.

### CHOLERA, PLAGUE AND YELLOW FEVER.

There has been no outbreak during the year under this heading, either in the Port or on Manchester bound vessels.

Your Medical Officer is again indebted to the Zeba Co., 66, Seel Street, Liverpool, for sending in a return of rats caught on various vessels lying in Manchester Docks during the year. The gross number of rats is below the average, but a smaller number of vessels were cleared of the vermin. During the thirteen years respecting which one has taken note of the work of this Company, their agents have captured and destroyed on vessels in Manchester docks the grand total of 98,433 rats.

No. of Rats Destroyed on Vessels in the Port of Manchester during the Year 1918.

	20 21221	No. of	111 19101	No. of
Month.	,	Vessels.	Ra	its destroyed.
January		6	• •	318
February		6		204
March		3	• •	98
April	• •	6	• •	330
May		7	• •	311
June		4		167
July		I		47
August		4		189
September		7	574 B = 0	404
October		7	• •	351
November		4		201
December		8		278
Total	.s	63		2898

The classification of the rats caught on board ship is as follows:—

Grey rats (Mus alexandrinus)	2257
Brown rats (Mus decumanus)	475
Black rats (Mus rattus)	166
	2898

The number of rats caught on dock premises during the year was 6,533, but no classification of these is obtainable.

The following Table shews the Ports having communication with Manchester that have been considered as infected during the year with either Plague, Cholera or Yellow Fever, also the total number of vessels from each Port of Departure classed as infected under the particular heading.

Name of Country and Port.	Number of Vessels from Ports of Departure Infected with				
Traine of Country and Fort.	Plague.	Cholera.	Yellow Fever,		
EGYPT:		2.5	0.5		
		25	25		
India: Bombay		10	10	0 <b>4</b> .	
Karachi		3	3		
Calcutta		7	7	• •	
Madras		3	3	• •	
Rangoon		2	2	• •	
CEYLON:					
Colombo		I	I	••	
Brazil:					
Rio de Janiero	• •	9	9		
Argentine: Bahia Blanca		I	I		
Totals		61	61	• •	

### TABLE I.

The following Table gives the number of cases of sickness which were removed to various hospitals, other than those within the Port of Manchester, from Manchester bound ships:—

Removed	to Ho	ospital a	t Baltimore				I
,,	,,	,,	Bizerta				I
,,	"	,,	Douglas				I
÷,,	,,	,,	Dublin				I
,,	,,	,,	Durban				I
,,	,,	, ,	Garston				I
,,	,,	,,	Genoa		• •		3
,,	,,	,,	Gibraltar		• •		3
,,	,,	,,	Glasgow		• •		I
,,	,,	,,	Grosse Isle				6
, ,	,,	,,	Liverpool		• •		22
,,	,,	,,	Narvik		• •		I
,,	,,	,,	Norfolk, Va.	• •			I
,,	,,	,,	Philadelphia		• •		2
,,	,,	,,	Queenstown		• •	• •	I
,,	,,	,,	Sierra Leone	• •	, • •		2
,,	,,	,,	Swansea				I
<b>,</b>	,,	, ,	Sydney, C.B		• •	• •	4
					TOTAL	• •	53

### TABLE II.

The number of cases removed to Hospital within the Port of Manchester, was as follows:—

Removed to Hospital at Manchester and Salford ...

89

### TABLE III.

In this Table are included those who died at sea from Sickness, together with those who lost their lives through drowning, etc.:—

Deaths at sea from Disease	• •		• •		I
Deaths from Drowning		• •	• •		I —
			TOTAL	• •	2

# TABLE IV.—PARTICULARS OF CASES OF INFECTIOUS DISEASE ON MANCHESTER-BOUND VESSELS.

Remarks	The carpenter was affected during the home-ward passage.	A fireman was removed to hospital at Narvik.	A sailor was removed to hospital at Philadelphia.	Four Lascars affected during the homeward passage.	A sailor was removed to Ladywell Sanatorium, on March 25th, suffering from this fever. The necessary disinfection was carried out. He was discharged from hospital on April 3rd.	A sailor was removed to hospital at Glasgow.
		:	:	:	:	•
Sickness	Enteric fever	Phthisis	Malaria	Chicken-pox	Enteric fever	Enteric fever
ted	•	•	•	•		:
Where Inspected	Salford	Salford	Salford	Salford		Salford
	:		•	•		:
Where from	Bombay	Norway	Baltimore	New York		Boston
		•				•
Name of Vessel	s.s. ''Elysia''	s.s. "Umba"	s.s "Hambleton Range"	s.s. "City of Marseilles"		s.s. "Mercian"
Date.	81	2,	N	I.V.		26
 	1918 Jan.	Feb.	Mch.	Mch.		June

TABLE IV. (continued).—PARTICULARS OF CASES OF INFECTIOUS DISEASE ON MANCHESTER-BOUND VESSELS.

REMARKS	Several of the crew suffered from malaria during the voyage. A trimmer was removed to hospital at Bizerta, suffering from dysentery.	A sailor was removed to hospital at Liverpool.	An apprentice was removed to hospital at Calcutta.	The chief engineer was removed to Ladywell Sanatorium and was discharged from hospital on September 30th.	A horseman died on August 6th and was buried at sea.	The chief engineer was removed to hospital at Liverpool  Two cases were removed whilst the vessel was in Manchester, the first on the ship's arrival. and the second on September 30th. In each case the men's quarters were disinfected. Both made good recoveries.
Bickness	Malaria Dysentery	Erysipelas	Chicken-pox	Enteric fever	Phthisis	Enteric fever
Where Inspected	Salford	Salford	Salford	Salford	Salford	Salford
Where from	Cochin and Tatroria	Philadelphia	Calcutta	Dieppe	Mobile	Montreal
Name of Vessel	s.s. "Malatian"	s.s. "Manchester Shipper"	s.s. "Clan Macphee".	s.s. "Isbjorn"	s.s. "Meltonian"	s.s. "Manchester Shipper"
Date	July I	July 9	Aug. 16	Aug. 20	Aug. 27	Sept. 19

TABLE IV. (continued).—PARTICULARS OF CASES OF INFECTIOUS DISEASE ON MANCHESTER-BOUND VESSELS.

				14		
REMARKS	A sailor.	Several of the crew affected during the voyage.	A Lascar died on October 4th and was buried at sea the same day.	The second-steward was removed to hospital at Norfolk, Va.	The master left the vessel on its arrival in port suffering from an attack. The majority of the crew had also suffered from the the same complaint during the voyage.	The firemen's cook affected during the voyage.
Sickness	Phthisis	Malaria	Phthisis	Enteric fever	Malaria	Malaria
Where Inspected	Salford	Salford		Salford	Salford	Salford
Where from	West Africa	Puerto (Mexico)		Texas	Dakar	Bombay
Name of Vessel	s.s. "Gardenia"	s.s. "Clan Sinclair"		s.s. "British Star".	s.s. "Sorrento"	s.s. "Clan Alpine"
Date	Sept. 24	0ct. 23		Oct. 23	Oct. 25	Nov. 13

(continued).—Particulars of Cases of Infectious Disease on Manchester-Bound Vessels. TABLE IV.

			15		
REMARKS	A sailor was removed to hospital at Gibraltar.	One of the children of the master.	An apprentice was removed to Ladywell Sanatorium and was discharged from hospital on December 21st.	The chief engineer was removed to hospital at Sierra Leone, on November 9th. Several of the crew had also suffered during the voyage.	
	•	:	:	:	
Sickness	Enteric fever	Measles	Enteric fever	Malaria	
ğ	·	:	g 9	9 9	
Where Inspected	Salford	Ellesmere Port	Salford	Salford	
			•	•	
Where from	Alexandria	:	Montreal	West Africa	
Name of Vessel	s.s. "Chicago City".	Canal boat "Rembrandt"	s.s. "Manchester Brigade"	s.s. "Clan Chisholm".	
9	4	9	9	ĭ	
Date	Dec.	Dec.	Dec.	Dec.	

### FOOD INSPECTION.

Four Magistrates' Orders for destruction were granted during the year, this being necessary owing to difficulty in obtaining a responsible person to surrender certain articles.

### IMPORTATION OF LIVE STOCK.

The following table shews the total number of live stock imported during the year:—

		Sheep and		
	Cattle.	Lambs.	Pigs.	Goats.
Coastwise (Irish)	8,968	13,967	385	38
Foreign		ASP		

### FOREIGN MEAT REGULATIONS.

Two casks of ox-tongues, imported on February 7th, on the s.s. "Manchester Merchant," from St. John, were, in default of re-exportation under the provisions of the above Regulations, destroyed. The tongues were so mutilated as to give the impression that nodules of Actinomycosis had been excised.

### RESULTS OF INSPECTION.

The following tables show the amounts of Food Imports which have been condemned during the year; Table A giving particulars of seizures at the Foreign Animals Wharf, and Table B giving particulars of seizures on the various Dock Quays. It will also be noticed from Table C that a quantity of tinned goods, etc., have been voluntarily surrendered for destruction. There were no articles seized in the Runcorn Section.

(A	A.)		7	Wei	ght	
Articles.	·		Τ.	С.	q.	lbs.
Beef (9 carcases and parts	)	• •	2	9	2	2
Mutton (part carcase)			О	О	2	4
Beef Offal (II full sets, etc.	)		О	14	I	17
Mutton Offal (2 full sets)	• •	• •	0	О	I	16
Pork (1 carcase)	• •	• •	О	2	О	16
	TOTAL	• •	3	6	3	27

(B.)				
A / * 1		Weig		
Articles.	1.	С.	q.	lbs.
Grain, Cereals, &c.—				
Wheat	137	13	Ο	12
Cornflour and Corn Meal	22	14	2	9
Rolled Oats	16	IO	I	16
Oats	. 19	4	2	7
Maize	14	18	Ο	18
Barley	12	II	3	2
Farinha	12	7	Ο	O
Corn Meal Grits	7	5	2	9
Flour	2	IO	О	O
Oatmeal	3	3	2	21
Peas	O	IO	О	8
Quaker Oats	О	9	2	24
Lentils	О	6	2	O
Groats	O	I	O	O
Fruit and Vegetables—				
Oranges (158 cases and 95 boxes)	20	4	О	O
Lemons (375 boxes)	15	15	2	O
Onions (60 cases and 15 bags)		17	О	O
Tinned Foods—	Ü	,		
Tomato Puree (1,303 tins)	13	3	0	24
Condensed Milk (13,846 tins)	6			I4
Tomatoes (1,822 tins)		I		2
Roof (601 tina)	J	II		25
Figh (175 time)	0	3		25 25
O T (- 4!)	0	_		2
D ( 1' )	0			IO
	0	0		
A D . f	0			20 20
D = -1 = - / - 1:	0			
On Tail (a ting)				$12\frac{1}{2}$
Minced Collops (1 tin)	0	0	0	2 T1
Miliced Collops (1 till)	O	О	О	$1\frac{1}{2}$

			(B) con	tinuea	<i>!</i> ·				
			, ,				Wei		
	Articles.					Τ.	С.	q.	lbs.
Miscel	llaneous—								
	Coconut Oil	• •		• •		12	7	О	O
	Sugar	• •				IO	5	I	18
	Bacon and H	ams			• •	4	14	3	12
	Beef	• •	• •		• •	9	Ο	I	18
	Mutton	• •		• •	• •	Ο	13	Ο	23
	Honey	• •		• •	• •	Ο	5	Ο	Ο
	Currants (3 b	ags)			• •	О	I	2	Ο
	Spaghetti (5	boxes	)		• •	Ο	I	I	Ο
	Eggs (830)	• •		• •	• •	Ο	Ο	3	14
	Cheese	• •		• •	• •	О	Ο	2	4
	Almonds	• •	• •	• •	• •	0	0	0	19
			TOTAL		• •	352	18	I	Ο
						3	6	2	27
		Gı	ross To	ΓAL	• •	356	4	3	27

### Voluntarily Surrendered.

			V	Veig	ght	•
Articles.			Т.	C.	q.	lbs.
Potatoes (25 bags)	• •		I	5	Ο	Ο
Beef			Ο	I	I	О
Bacon and Hams		• •	Ο	О	3	23
Tinned Beef (478 tins)	• •		I	6	2	20
" Tomatoes (300 tine	s)		Ο	8	Ο	4
" Tongues (86 tins)		• •	Ο	I	2	21
,, Apricots (41 tins)	• •	• •	Ο	Ο	I	2
,, Fruit (8 tins)	• •		Ο	0	О	20
" Salmon (9 tins)	• •	• •	Ο	Ο	Ο	9
" Peas (2 tins)	• •	• •	О	О	О	5
	TOTAL	• •	3	4	0	20
			-			

### FRESH MEAT.

Emergency slaughters, owing to accident, or ordered by the Inspector of the Board of Agriculture, involved 21 beasts, 16 sheep, and I pig. The condemnations from these are shewn in Table A.

### GRAIN AND CEREALS.

The gross condemnations under this head were not so large as during the previous year.

### TINNED FOODS.

There was a decrease on the average condemnations under this heading, this being chiefly due to the established policy of communicating with the consignor, and pointing out how future seizures could be avoided. This way of dealing with such goods has been found very successful in obtaining the desired improvement.

Samples forwarded for examination to the Manchester Public Health Laboratory during the year were:—

Article.	Object of Examination.	Result.
Lymphatic glands of frozen pork.	Evidence of tuberculosis.	Confirmed: tubercle bacilli found.
Tinned Meat	Evidence of decomposition.	No trace.
,, ,,	Evidence of decomposition and lead contamination.	No trace of decompcsition, but lead contamination found.
Tinned Salmon	Evidence of metallic contamination.	Evidence of tin contamination found.
Condensed Milk	Evidence of decomposition.	Confirmed.

TABLE I.—SHEWING PRINCIPAL FOOD IMPORTS AT CHIEF HOME PORTS.

Port.	Import.	AMOUNT. 1913	Amount 1914	AMOUNT. 1915	Amount. 1916	A MOUNT. 1917
London	Grain	£ 18,864,667 17,849,573 13,486,345 8,025,015 7,868,963 6,365,035 3,732,008 2,847,883	£ 23,485,688 19,587,199 13,913,144 12,489,422 7,603,189 5,494,738 4,805,958 2,503,399	£ 37,009,479 30,579,442 19,245,425 13,039,023 10,460,687 7,195,243 6,901,940 1,965,551	£ 37,185,048 35,228,955 17,664,248 16,843,009 5,962,623 8,870,843 8,119,554 1,151,257	£ 36,044,889 47,446,306 11,404,173 17,706,449 9,030,379 3,655,387 10,165,172 - 985,499
Liverpool.	Meat Grain Sugar Fruit Lard Cheese	19,079 <b>197</b> 16,996,644 3,992,207 5,521,733 1,975,999 995,607	20,836,839 16,060,441 7,015,675 4,937,843 1,700,209 985,530	31,293,277 21,936,436 8,977,871 5,195,727 1,554,380 1,635,688	37,628,265 31,125,254 9,996,768 4,750,975 4,959,137 2,116,819	40,748,085 45,444,439 12,331,732 3,500,668 4,695,634 4,803,175
Hull	Grain Butter Meat Eggs Margarine Sugar Lard Fruit Fish Vegetables	10,829,716 3,647,017 2,102,204 1,996,485 1,141,040 1,049,030 839,065 631,926 636,192 657,899	9,381,978 3,312,328 2,476,320 1,481,155 1,083,290 1,173,286 561,510 482,284 474,991 411,601	12,016,892 2,764,361 4,522,812 1,080,178 1,968,576 746,180 749,025 536,438 611,741 513,175	11,790,589 2,440,364 4,676,283 847,965 2,739,356 965,185 713,686 351,424 442,872 462,587	11,444,042 2,690,018 5,538,322 1,394,854 1,626,822 72,470 1,333,706 176,749 1,097,150 522,652

Table I. (continued)—Shewing Principal Food Imports at Chief Home Ports.

		CILLEI	TIOME TO	K15,		
Port.	IMPORT.	Anount. 1913	Амоинт. 1914	Amount. 1915	Amount. 1916	AMOUNT. 1917
Manchester	Grain Sugar Meat Butter Lard Fruit Eggs Cheese	£ 4,577,438 955,601 355,460 — 937,589 324,984 84,141 141,724	£ 4,707,763 1,823,605 1,639,781 953,882 849,164 392,097 334,275 96,386	£ 6,781,348 1,497,456 556,525 517 833,730 507,209 186,228 221,046	£ 8,417,687 1,692,194 1,059,319 21,977 1,155,280 583,910 136,459 316,058	£ 10,271,329 1,075,532 2,230,259 3,957 798,217 356,047 2,454 594,674
Southamp- ton	Meat Butter Cocoa and Coffee Vegetables Fruit Grain	2,592,137 1,689,660 1,479,872 869,886 641,250 635,283	1,960,478 1,755,508 921,999 945,191 500,784 288,339	1,196,063 2,421,815 66,265 632,696 270,344 201,174	2,222,176 997,916 234,170 731,224 298,584 261,904	2,698,034 911,128 76,610 1,269,241 594,476 855,139
Leith	Butter Grain Eggs Sugar	2,509,660 3,659,495 1,527,153 1,325,097	2,908,736 2,709,458 1,307,996 1,074,050	2,309,733 3,817,282 760,251 798,521	1,980,737 4,008,473 602,768 655,023	345,643 2,979,932 18,597 303,421
Glasgow	Grain Meat Fruit	5,166,354 1,702,115 75 <sup>0</sup> ,747	4,296,669 1,547,117 641,943	6,250,699 2,101,816 848,840	90,950 2,818,777 981,770	13,824,507 4,216,200 596,246
Harwich	Meat Eggs Butter Margarine Cocoa	6,837,574 1,400,663 1,395,695 1,116,645 327,177	5,027,108 891,505 987,775 1,136,620 188,850	390,866 138,311 27,958 1,256,836 264,883	20,760 13,370 582 374,065 60,915	239,572 96,784 122,890 1,604,513

Table I. (continued)—Shewing Principal Food Imports at Chief Home Ports.

The service of the se						
Рокт.	IMPORT.	Амоинт. 1913	<b>A</b> MOUNT. 1914	Амоинт. 1915	AMOUNT. 1916	Amount. 1917
Bristol	Grain Sugar Fruit Cheese Meat Lard	£ 6,580,286 1,181,620 1,122,581 969,982 631,916 433,556	£ 7,353,909 1,663,213 1,114,384 954,842 705,118 384,785	£ 8,641,719 1,565,795 1,135,237 1,087,036 1,561,561 486,337	£ 8,737,673 1,918,179 1,158,483 1,227,884 1,643,961 303,050	£ 11,843,865 951,194 637,212 1,281,748 3,524,944 352,344
Newcastle- on-Tyne	Butter Grain Meat Eggs Sugar	2,631,361 1 614 942 1,029,728 500,142 285,656	2,227,775 1,170,341 909,439 423,510 241,674	3,275,829 1,506,689 508,963 415,330 79,022	2,023,752 2,013,701 297,770 247,516 14,066	2,072,010 1,710,190 1,704,360 832,206
Grimsby	Butter Meat Eggs Margarine Grain	3,338,569 822,720 405,198 311,862 108,424	2,994,848 1,963,590 488,300 197,291 143,720	4,561,830 5,660,551 582,669 75,942 134,297	4,128,359 5,254,004 415,501 5,385 100,674	2,120,435 2,436,734 351,453 — 111,576
Cardiff	Grain Vegetables Meat	2,357,614 184,644 174,718	2,684,332 134,479 86,240	2,956,541 111,915 375,142	3,765,962 131,123 5,106	3,896,268 192,807 370,835

23

TABLE II.—SHEWING THE PRINCIPAL PRODUCING COUNTRIES AND THE DIFFERENCES IN THE AMOUNTS OF FOOD IMPORTS PRODUCED FOR THIS COUNTRY IN THE SIX YEARS 1912, 1913, 1914, 1915 1916 and 1917.

COUNTRY.	YEAR 1912.	YEAR 1913.	YEAR 1914.	YEAR 1915.	YEAR 1916.	YEAR 1917.
South and Central America	£ 44,792,839	£ 46,411,333	£ 30,990,874	£ 73,288,942	£ 67,968,042	£ 70,111,163
United States of America	33,002,029	43,873,324	37,104,748	91,584,431	128,951,191	154,812,6 1
Australia and New Zealand	23,592,786	24,291,261	28,264,451	29,295,016	28,263,499	40,843,044
Denmark	21,515,778	23,225,293	24,712,546	21,803,097	21,211,302	17,350,873
Canada	20,694,450	20,803,133	25,136,082	29,927,365	45,963,887	57,434,313
India	25,308,988	19,973,403	16,234,738	26,603,357	24,823,715	23,159,569
Netherlands	14.565,378	16,665,064	16,958,419	14,452,843	14,474,457	15,106,614
Germany	10,421,938	15,836,687	8,249,664	1,600	7,448	301
Russia	17,464,442	15,172,445	12,858,755	8,706,082	691,288	128,951
France	9,434,472	9,026,625	7,195,398	7,555,593	5,424,090	4,359,770
Spain	5,154,402	5,038,274	5,410,191	6,290,858	7,708,146	5,463,008
Sweden	2,507,251	2,520,589	2,242,576	1,141,818	16,845	
Belgium	2,655,405	2,064,538	817,404	99,527	54,908	17,652
Roumania	2,589,228	1,062,506	2,666,410			

### III.—COMPARING FOOD IMPORTS WITH TOTAL IMPORTS, AT THE PORTS, AND SHEWING THE RATE OF INCREASE AND DECREASE. TABLE

	8061	6061	0161	1161	2161	1913	1914	1915	9161	161
	77	72	145	**	72	t	£	72	72	77
Total Imports.	195,329,043	205,639,879	228,260,138	229,988,484	239,344,384	253,879,289	253,172,916	337,565,905	359,382,178	337,703,405
Food Imports	74,318,707	81,753,813	87,112,349	91,982,211	92,127,557	91,190,956	106,388,309	148,058,627	159,086,970	155,615,189
LIVERPOOL:— Total Imports.	140,635,000	148,596,750	170,270,246	159,914,782	179,250,136	175,491,584	166,443,588	230,027,506	280,023,728	372,639,066
Food Imports .	47,093,893	47,389,221	47,808,612	47,728,697	52,017,164	53,339,221	57,980,678	83,148,700	101,381,687	129,213,261
HULL:— Total Imports .	35,338,690	39,629,597	42,282,026	41,082,231	48,607,902	49,840,283	41,027,070	50,157,191	54,155,257	57,121,843
Food Imports .	18,192,495	20,544,060	20,946,627	20,968,058	24,584,491	24,286,311	21,380,777	26,178,958	26,041,698	28,344,413
MANCHESTER:— Total Imports.	25,647,640	28,943,444	29,944,905	32,502,954	35,111,128	35,290,606	33,741,734	39,656,092	47,967,835	57,731,668
Food Imports .	6,719,134	7,971,958	7,730,289	7,626,060	7,425,765	7,502,964	11,065,871	10,993,977	13,738,286	15,591,837
SOUTHAMPTON: Total Imports.	20,011,756	21,449,767	21,286,105	20,764,972	24,543,991	25,492,809	18,723,500	14,360,522	12,087,465	18,538,064
Food Imports .	8,624,665	9,618,461	8,252,323	7,446,748	8,552,420	9,105,704	7,101,198	5,554,634	5,269,714	7,056,881
BRISTOL:— Total Imports .	13,644,676	14,392,176	14,991,615	15,557,506	17,511,486	18,019,452	17,516,336	23,454,315	24,590,007	31,987.856
Food Imports .	8,418,226	9,432,740	9,288,803	6,715,609	11,413,773	11,647,888	12,946,310	14,841,624	16,002,736	19,434,537

7191	2,720,799	2,461,538	40,342,990	22,051,691	6,971,770	421,150	13,168,468	5,730,369	12,161,675	6,212,030	12,652,449	6,792,903	11,055,496	4,746,313
9161	986,502	556,275	33,804,247	17,006,163	8,314,327	659,740	16,675,229	9,500.547	16,907,932	11,259,672	11,706,702	5,592,756	9,039,528	4,029,407
1915	3,769,541	2,599,751	26,568,225	12,084,518	9,793,715	692,771	15,078,990	9,279,769	15,493,169	11,799,435	11,859,937	6,929,227	8,387,354	3,652,692
1914	17,066,312	9,107,931	16,870,214	9,517,902	14,582,065	1,718,204	13,751,770	9,132,994	13,259,376	6,491,581	9,387,476	5,744,058	6,056,307	3,099,151
1913	25,637,268	11,251,471	18,485.	8,455,695	15,469,330	1,156,056	15,748,662	10,944,251	15,849,100	5,325,294	11,349,000	7,013,067	6,704,664	2,878,353
1912	25,548,997	11,881,961	16,941,685	7,840,368	14,582,065	1,232,524	16,531,420	10,257,704	14,786,430	5,130,616	10,043,427	6,050,212	6,153,205	2,827,732
1161	22,437,602	10,047,467	15,631,149	7,345,961	13,022,682	962,088	15,054,221	9,287,551	13,544,125	5,153,730	9,784,592	5,746,806	6,016,772	3,218,689
0161	21,152,857	9,091,399	14,533,330	7,024,801	10,068,224	760,218	13,559,655	8,535,627	12,615,959	4,587,264	9,442,944	5,424,098	6,375,106	3,326,144
1909	19,824,200	9,822,538	14,267,670	7,636,454	10,008,946	819,564	13,658,737	8,993,122	11,489,149	4,489,871	9,048,035	5,502,492	5,853,477	3,074,149
1908	19,444,348	9,843,289	14,250,321	7,105,912	9,785,159	711,782	12,883,890	8,556,205	10,913,713	4,608,242	9,423,983	5,573,463	5,807,777	2,854,177
	HARWICH:— Total Imports.	Food Imports .	GLASGOW:— Total Imports.	Food Imports .	FOLKESTONE:— Total Imports.	Food Imports.	Lеттн:— Total Imports .	Food Imports .	GRIMSBY:— Total Imports.	Food Imports .	NEWCASTLE:— Total Imports.	Food Imports .	CARDIFF:— Total Imports.	Food Imports .

-

•

### THE SANITARY CONDITION OF SHIPS.

The number of vessels registered under the Merchant Shipping Act inspected during the year, totals 1,672. Of this 555 were found with insanitary conditions of various kinds. When compared with the numbers for 1917, a decrease under both headings is noted. In 1917, the Inspections numbered 1,919, and the defective vessels 633. The percentage of defective vessels is therefore 0.21 higher for 1918. In the Manchester Section there is a decrease of 156 inspections from the previous year, and in the Runcorn Section a decrease of 91. The following Table shews the total number of vessels inspected in the Port, together with the total numbers and percentage of defective vessels each year, from 1898 to 1918 inclusive.

The steady diminution of inspections during the period of the War has been due to the diminished number of ships entering the Port, this applying equally to both foreign and coastwise traffic. A large quantity of foreign traffic was suspended during this period.

Mr. Whalley has assisted in the duties of inspection at each section of the Port as occasion arose.

The total number of vessels inspected within the Port, together with the total number of percentages of defective vessels, from 1898 to 1918:—

	No.	No.	
Year.	Inspected.	Defective.	Percentage.
1898	 1346	 263	 19.5
1899 -	 1294	 251	 19.4*
1900	 1610	 231	 14.4*
1901	 1344	 263	 19.5
1902	 2477	 870	 35.1
1903	 2585	 916	 38.4
1904	 2621	 1241	 47 · 3 <b>5</b>
1905	 2510	 1169	 46.57
1906	 2284	 984	 43.08
1907	 2592	 1014	 39.12
1908	 2562	 954	 37.22
1909	 2871	 1062	 36.99
1910	 2879	 1003	 34.86

		No.	No.	
Year.		Inspected.	Defective.	Percentage.
1911	• • • •	2853	 1033	 36.20
1912		2778	 871	 31.35
1913		2786	 904	 32.44
1914		2775	 810	 29.19
1915		2623	 749	 28.61
1916		2264	 729	 32.30
1917		1919	 633	 32.98
1918		1672	 555	 33.19

The number of vessels inspected at various points within the Port during each year are shewn as follows:—

Comparison as to the number of vessels inspected at various points within the Port:

Year		chester Salford.		ncorn eston P		Ellesme Port.		Widnes.		Other Places
1898		762		386		III		60		27
1899		667		308		108		43		168*
1900		619		331	• •	80		63	• •	517*
1901		861		313		70		66	• •	34
1902		1194		862		137		174		IIO
1903		1087		737		192		206		163
1904		1186	• •	965		175		155		137
1905	• •	1157		863		164		135		191
1906		1105		731		173		99		176
1907		1223		883		191		125	• •	167
1908	• •	1286		852		171		82		171
1909		1338		890		273		174		196
1910		1359		969	• •	285		156	• •	IIO
1911		1390		909	• •	264		97		193
1912		1369		955	• •	235		94		125
1913		1414	• •	912		223		III	• •	126
1914	• •	1304	• •	821		283		156	• •	211
1915	• •	1345		663	• •	258	• •	106		251
1916	• •	1163	• •	579	• •	206		141		177
1917	• •	947		498		188		136	• •	150
1918	• •	795	• •	474	• •	127	• •	145		131
			* E	xtra Ins	pector	at Easth	am.			

The following Table shews the progress made during the year in obtaining the remedy of defects.

### VESSELS RENDERED SANITARY.

	1911	1912	1913	1914	1915	1916	1917	1918
January	51	6 <b>1</b>	53	29	II	35	IO	16
February	51	54	37	24	20	39	28	20
March	63	58	40	32	31	50	28	33
April	41	53	44	46	19	46	29	32
May	49	44	55	43	17	71	26	18
June	44	46	46	35	32	61	34	25
July	54	6 <b>1</b>	56	29	33	43	33	25
August	59	31	35	34	45	56	13	38
September	67	52	38	33	30	54	32	30
October	<b>5</b> 9	51	47	29	31	50	35	26
November	54	39	50	19	41	33	33	23
December	62	45	38	29	34	86	39	39
							-pro-population denotes	-pro-processor
Totals	678	637	588	530	387	396	340	325

Eighteen Public Health Notices have been served, as against 9 in 1917. It has been ascertained that eight of these have been fully complied with and two partly, and there has been no opportunity of inspecting the other vessels.

## MANCHESTER PORT SANITARY AUTHORITY.

		TOTALS	LS OF		MONTHLY		SPEC	INSPECTIONS	FOR		0-15-1	1910-15-16-17-18.	18.		
	(B)	1910. (Record Year)	7)		1915.		•	1916.	i		1917.			1918.	
	M/c.	RUN-	TOTAL.	M/c.	RUN-	Total.	M/c.	RUN-	Total.	M/c.	RUN-	Toral.	M/c.	Run- corn.	Total.
January	06	98	176	50	46	96	62	42	104	62	43	105	48	44	95
February	62	110	207	108	106	214	06	7.1	161	88	75	163	59	69	128
March	111	1111	222	144	126	270	93	77	170	78	06	168	55	70	125
April	86	107	205	108	86	206	84	92	160	87	85	172	80	96	176
May	133	149	282	147	126	273	144	108	252	75	7.1	146	63	43	106
June	121	112	233	119	104	223	115	87	202	06	6°	182	89	1.4	145
July	114	128	242	123	86	221	132	124	256	104	91	195	84	96	180
August	135	129	264	121	117	238	94	77	171	92	41	117	69	7.1	140
September	107	120	227	118	79	197	94	105	199	83	86	169	98	92	162
October	139	157	296	122	06	212	126	103	229	78	96	174	55	47	102
November	104	100	204	130	105	235	83	62	162	74	62	136	62	69	131
December	176	145	321	144	94	238	116	85	198	100	92	192	110	75	185
TOTALS	1425	1454	2879	1434	1189	2623	1233	1031	2264	995	924	1919	839	833	1672
INCREASE (+) OR DECREASE () (from previous year	CREASE (+) OR DEC from previous year	DECREAS:	0.00	+64	-216	-152	-201	-158	359	-238	-107	-345	-156		-247

1918.—TABLE A.

Shewing the number of vessels inspected and found insanitary arriving from Foreign and Coastwise Ports:—

Foreign—		Inspected.	Insanitary	No, of Orders issued under P. H. Act.
Steamships	• •	429	198	О
Sailing Vessels	• •	105	30	O
		American residente delle code		·
Totals		534	228	О
		Section of the sectio		Total Paris
Coastwise—				
Steamships	• •	642	136	5
Sailing Vessels	• •	496	191	· 13
				and the second s
Totals	• •	1138	327	18
Gross Totals	• •	1672	555	18

TABLE B.

Shewing the numbers of British and Foreign vessels inspected and numbers found insanitary:—

		Inspected.	Insanitary.
British Steamships		1021	324
,, Sailing Vessels		197	58
,, Flats and Barges		395	160
Foreign Steamships	• •	57	12
,, Sailing Vessels	• •	2	I
Totals		1672	555
Revisits	 isits	424 2096	

TABLE C.

Shewing the number of vessels inspected and number found insanitary at different points in the Port:—

ь.				Inspected	Insanitary			
Acton Grange				I	0			
Astmoor Marsh (	Wigg's	Work	s) .	83	25			
Barton	• •			5	4			
Davyhulme				13	I			
Eccles (including I	rwell P	ark W	harf)	II	7			
Ellesmere Port		. ,		127	54			
Manchester, Salfor	rd and	Stretf	ord.	795	254			
Partington				15	I			
Runcorn				365	126			
Warrington				3	I			
Weston Point and Weston Mersey								
Lock				109	36			
Widnes				145	46			
				ngangaran madiliki diga nghalandagi (b	quantum grants			
	Totals	S		1672	555			

TABLE D.

Shewing the Nationalities of the vessels inspected and number found insanitary:—

insameary.			Iı	spected	Insanitary
British		• •	 	1620	544
Norwegian	ı	• •	 • •	22	4
Spanish		• •	 	15	4
French		• •	 • •	5	0
Danish		• •	 • •	3	I
Russian		• •	 • •	3	2
American	(U.S.)	• •	 	2	О
Italian	• •		 	I	O
Swedish		• •	 • •	I	. O
					displacement of the second
	7	otals	 	1672	555

### TABLE E.

Shewing the number of crews of various Nationalities on vessels inspected during the year:—

$\mathbf{T}$		, .	- 1		
ĸ	71	11	91	1	
	T T	L.I	21	. д.	

DITTISII						
Europea	ns					24,780
Lascars					• •	3532
Chinese		2 • •		• •		402
Arabs				• •		23
						28,737
XT .						20,737
Norwegian	• •					434
Spanish				• •		404
French				• •		150
Indians				• •		137
Russian						134
American (U	J.S.)					120
Italian					• •	.31
Danish						30
Swedish				• •		28
Japanese	• •	• •	• •			20
		Total	• •	• •		30,225

### TABLE F.

Giving particulars of insanitary conditions found in the different vessels inspected:—

	Steam Ships.	Sailing Vessels.	Flats & Barges.
CREW'S QUARTERS.			
Accumulations of dirt and refuse in quarters	IO		
Accumulation of stagnant water ,,	II		
Bilges requiring or inaccessible for cleansing			7
Bulkheads defective allowing communication between W.C.'s, holds, &c., and quarters	7	-	26

	Steam Ships.	Sailing Vessels.	Flats & Barges.
Chain lockers open to forecastles &c	4	I	I
Chain locker casing broken and defective	I		<del></del>
Condensed moisture forming on iron decks and beams	2		I
Decklights, portlights, &c., broken & defective.	40	9	31
Drainage of quarters defective, allowing communication with w.c.'s, &c	10		direction and
Forecastles, &c., requiring cleansing, painting, limewashing, &c	122	10	49
Forecastles, &c., infested with vermin	2		policy difference
Forecastles, &c., deficient in lighting	4	-	16
Flooring, fittings, &c., defective	6	2	9
Iron over bunks unsheathed	3		2
Miscellaneous leakages into quarters	46	26	70
Ship's gear, stores, &c., kept openly in, or in communication with quarters	3	2	I
Ventilation inefficient or ventilators defective	18	16	5
Uncapped sounding pipe to ballast tank opening into forecastle	I		
CONDITION OF DECKS.			
Accumulations of dirt and refuse about decks  HEATING.	II		
Stoves and stove pipes defective	4	I	8
No stove provided	2		

OVERCROWDING	Steam Ships.	Sailing Vessels.	Flats & Barges
and uncertified accommodation occupied	6		6
Certified accommodation not marked in forecastle	3		3
STORAGE OF FOOD.			
Lockers without doors	7		2
Lockers requiring cleansing, limewashing, painting, repairing, &c			4
Food kept open in quarters	2	Special Proceedings	_
STORAGE OF WATER.			
Water tanks, &c., requiring cleansing	29	I	I
,, not accessible for cleansing		I	
Water tanks, casks, &c., in a defective condition.	I	8	30
No water receptacle			6
WATER CLOSETS.			
Flushing apparatus defective	36		
Flush and soil pipes defective	4		I
Pans, urinals, &c., in a foul or defective condition	15	I	
No pan provided		I	
Closets in foul condition	17	I	Lager-controls
,, requiring limewashing	I		
,, deficient in light or ventilation, or both	7	I	Carringani
,, doors and seats absent or requiring repairs	2	-	
,, insufficient accommodation	3	2	_
Totals	440	83	279

### REPORT ON THE ADMINISTRATION OF THE CANAL BOATS ACTS, 1877—84.

For the Year ended 31st December, 1918.

(I) Two Inspectors have been appointed by the Authority to carry out the provisions of the Canal Boats Acts, viz.:—

Henry Atkinson, for Section A (Manchester to Latchford); Walter Richmond, for Section B (Latchford to Eastham).

Both Inspectors have the Certificate of the Royal Sanitary Institute.

No Inspector is required to devote his whole time to the duties of inspections under the Canal Boats Acts. Their primary duty is the supervision of shipping registered under the Merchant Shipping Acts, and they are only required to inspect canal boats at such times as they can spare from their other duties.

For the purposes of administration, the Port is divided into two sections, viz.:—from Eastham to Latchford, including Widnes and Warrington, with headquarters at Runcorn, and from Latchford to Manchester, with headquarters at Manchester. Each section is under the control of an Inspector, who is directly and solely responsible to the Medical Officer of Health for the proper supervision of his district.

A motor boat is in daily use on the lower reaches of the canal, and this enables the Inspector to keep under constant supervision canal boats using the Port at various points.

(2) During the year there has been an increase of 133 inspections compared with those of the previous year. On the Runcorn section of the canal 608 inspections were made, showing an increase of 183 from the previous year's number. On the Manchester section 121 inspections were made, against 171 during the previous year, a decrease of 50.

The number of boats inspected, together with those discovered infringing the terms of the Canal Boats Acts, since the Authority undertook this duty, are as follows:—

Year.		Number Inspected.	Number Defective.	Percentage.
1902		73	31	42 · 46
1903		191	77	40 · 30
1904		230	105	45 .65
1905		209	132	63 • 15
1906		115	73	63 · 46
1907		84	55	75 .47
1908		150	67	44 .66
1909		257	IOI	39 •29
1910		230	87	37 ·82
1911	• •	307	127	41.36
1912		254	89	35 .03
1913	• •	432	159	37 .03
1914		382	. 122	31 41
1915		311	79	25 · 40
1916		409	112	27 · 38
1917		596	166	27.85
1918	• •	729	203	27.84

The proportion of defective boats to the total number inspected during the year amounted to 27.84, being about the same as in 1917.

(3) The following is a summary of the insanitary conditions and contraventions of the Acts found during the year:—

(a) Registration.	
Not registered	2 16
(b) Notification of Change of Master	0
(c) Certificates.	
Registration certificate absent	22 10
(d) MARKING.	
No marks  Marking indistinct or incorrect	10 15
(e) Overcrowding	10
(f) Separation of Sexes (want of)	8
(g) Cleanliness and Repairs.	
Cleansing of cabins required  Cabins, etc., dilapidated and repairs required  Miscellaneous leakages into cabins  Bulkheads defective allowing communication with holds	5 63 87
	~7
(h) VENTILATION AND LIGHTING.	-0
Ventilation inefficient and ventilators defective  Insufficient lighting	16 22
(i) PAINTING.	
Cabins, lockers, berths, etc., requiring painting	62

(j) Provision of Water Cask.	
No water vessel or vessel not of sufficient capacity	4
Water casks decayed and water vessels requiring	4.0
repairs	40
(k) Removal of Bilge Water.	
Bilge Pumps absent	O
,, ,, defective	2
Bilges requiring cleansing	Ι
(l) Notification of Infectious Disease	0
(m) Admittance of Inspector	0
Total	409

The proportion of infringements per boat works out at 2.0.

- (4) No prosecutions were undertaken during the year.
- (5) The usual steps have been taken to secure compliance with the Acts. In all cases complaint notes have been promptly served upon the owners, and if not attended to at the end of the prescribed number of days, a postcard asking for return of the certificate has been duly forwarded.
- (6) No cases of Infectious Disease have occurred on any canal boat during the year.
  - (7) No boats have been detained for cleansing or disinfection.
  - (8) and (9) The Authority is not a R gistration Authority.

RETURN SHOWING THE NUMBER AND TONNAGE OF VESSELS WHICH ARRIVED IN THE PORT OF

MANCHESTER IN 1918.

	Maı	Manchester.	Warn	Warrington.	Rui	Runcorn.	Ellesm	Ellesmere Port.		Totals.
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Foreign Steamers .	399	924,379	•	•	23	24,697	7	1,538	424	950,614
Sailing	•	•	*	•	43	4,250	5	494	48	4,744
TOTALS	399	924,379	:	•	99	28,947	7	2,032	472	955,358
					Ç	0			1	( C ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
Coastwise ( Steamers .	200	209,303	4	352	381	38,833	204	34,095	1415	342,503
(Sailing	Н	71	•	:	221	16,523	4	330	182	16,924.
Totals	292	269,374	4	352	558	55,356	268	34,425	1597	359,507
GRAND TOTAL.	9911	1,193,753	4	352	624	84,303	275	36,457	2069	1,314,865

The above information has been kindly supplied by H.M. Collector of Customs for the Port.

